

Remarks

Applicants have reviewed this Application in light of the Final Office Action (“*Office Action*”) dated November 13, 2008 and the Advisory Action (“*Advisory Action*”) dated March 11, 2009. The *Office Action* rejects Claims 1-39. To advance prosecution of this Application, Applicants amend Claims 1, 4, 9, 12, 23, 34, and 37-39. Applicants do not admit that any amendments are necessary due to the cited references or the Examiner’s rejections. Applicants traverse the rejections and respectfully request reconsideration and allowance of all pending claims.

Section 103 Rejections

Claims 1-3, 12-14, 23-25, and 34-36

The *Office Action* rejects Claims 1-3, 12-14, 23-25, and 34-36 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2004/0103218 to Blumrich et al. (“*Blumrich*”) in view of U.S. Publication No. 2002/0062454 to Fung (“*Fung*”). Applicants traverse this rejection.

Amended Claim 1 is allowable because the *Blumrich-Fung* combination fails to teach, suggest, or disclose each claim element. For example, the *Blumrich-Fung* combination fails to teach, suggest, or disclose dynamically allocating “a particular subset of the plurality of nodes to a particular job selected from a queue comprising a plurality of jobs, the dynamic allocation based on the determined status of each of one or more of the plurality of nodes” as recited in amended Claim 1. The *Advisory Action* relies on *Fung* for the dynamic allocation recited in Claim 1. *Advisory Action*, p. 2. The cited portion of *Fung* generally discloses a computer system that provides “optional dynamic workload management for multi-server environments.” *Fung*, ¶ 0011. *Fung* explains that the system comprises a “global master” that may “reconfigure the server type (such as between a web server type, a cache server type, a streaming media server type, or other type server) based on activity monitoring at the application level.” *Fung*, ¶ 0165. Thus, *Fung* discloses a global master that reconfigures server types based on activity monitoring. *Id.* Merely reconfiguring server types, however, does not teach, suggest, or disclose “dynamically allocat[ing] a particular subset of the plurality of nodes to a particular job selected from a queue comprising a plurality of jobs” as recited in amended Claim 1. Indeed, there is nothing in the cited portion of *Fung* that teaches, suggests, or discloses a “job selected from a queue” or a “queue comprising a

“plurality of jobs” as recited in amended Claim 1. Merely reconfiguring a server type (e.g., from web server to cache server), as disclosed in *Fung*, does not teach, suggest, or disclose allocating anything “to a particular job selected from a queue comprising a plurality of jobs” as recited in amended Claim 1. Accordingly, the cited portions of *Fung* fail to teach, suggest, or disclose “dynamically allocat[ing] a particular subset of the plurality of nodes to a particular job selected from a queue comprising a plurality of jobs” as recited in amended Claim 1. The cited portions of *Blumrich* fail to cure this deficiency of *Fung*. Accordingly, the *Blumrich-Fung* combination fails to support the rejection of amended Claim 1. For at least this reason, Applicants respectfully request reconsideration and allowance of amended Claim 1.

In rejecting Claims 12 and 23, the Office Action employs rationale similar to that used to reject Claim 1. Accordingly, for reasons analogous to those stated above with respect to amended Claim 1, Applicants respectfully request reconsideration and allowance of amended Claims 12 and 23.

Claims 2-3, 13-14, 24-25, and 34-36 depend from independent claims shown above to be allowable. In addition, these claims recite further elements that are not taught, suggested, or disclosed by the cited references. For example, the cited references fail to teach, suggest, or disclose that “the cluster management engine is further operable to determine a topology of the plurality of nodes based, at least in part, on the determined status of the nodes” as recited in Claim 2. The *Office Action* relies on *Blumrich* as allegedly teaching this element. *Office Action*, p. 5. The cited portion of *Blumrich* describes factors that may be used to select either the Torus network or the Tree network:

When mapping collective communications onto the system networks, it must first be decided whether the particular communication is better suited to the Torus network, or to the Tree Network. Factors to consider include the topology of the communication group, the expected bandwidth requirements of the communication, whether or not the communication may take advantage of the “Global Functions” supported by the Tree, and whether the activity on one of the networks at the time may favor using the other to distribute traffic.

Blumrich, ¶ 0255. The factors described by *Blumrich* fail to teach “determin[ing] a topology of the plurality of nodes based, at least in part, on the determined status of the nodes” as recited in Claim 2. *Blumrich* describes factors including topology, bandwidth requirements, taking advantage of “Global Functions,” and which network the activity may favor. *Id.* *Blumrich* considers these factors and uses them to select one of the predetermined topologies,

either the Torus network or the Tree network. *Id.* Even if one or more of these factors can be considered “the determined status of the nodes,” as recited in Claim 2, *Blumrich* does not “determine a topology of the plurality of nodes based, at least in part, on the determined status of the nodes” as recited in Claim 2. In *Blumrich*, the topology is predetermined, and *Blumrich* merely selects the better-suited topology. *Fung* fails to cure this deficiency of *Blumrich*. Accordingly, Claim 2 is allowable over the cited references.

For at least the foregoing reasons, Applicants respectfully request reconsideration and allowance of Claims 2-3, 13-14, 24-25, and 34-36.

Claims 4-11, 15-22, 26-33, and 37-39

The *Office Action* rejects Claims 4-5, 8-11, 15-16, 19-22, 26-27, and 30-33 under 35 U.S.C. § 103(a) as being unpatentable over *Blumrich* in view of *Fung* and “The Cactus Worm: Experiments with Dynamic Resource Discovery and Allocation in a Grid Environment,” by Allen et al. (“*Allen*”). The *Office Action* rejects Claims 6-7, 17-18, and 28-29 under 35 U.S.C. § 103(a) as being unpatentable over *Blumrich* in view of *Fung*, *Allen*, and U.S. Publication No. 2003/0217105 to Zircher et al. (“*Zircher*”). The *Office Action* rejects Claims 37-39 under 35 U.S.C. § 103(a) as being unpatentable over *Blumrich* in view of *Fung* and Official Notice. Applicants respectfully traverse these rejections.

In rejecting Claims 37-39, the *Office Action* employs rationale that is similar to that used to reject Claim 1. Accordingly, for reasons analogous to those stated above with respect to amended Claim 1, Applicants respectfully request reconsideration and allowance of amended Claims 37-39.

Claims 4-11, 15-22, and 26-33 depend from independent claims shown above to be allowable. In addition, these claims recite further elements that are not taught, suggested, or disclosed by the cited references. Accordingly, Applicants respectfully request reconsideration and allowance of Claims 4-11, 15-22, and 26-33.

Conclusion

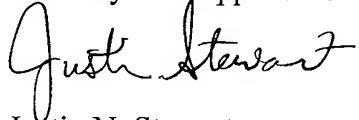
Applicants have made an earnest attempt to place this Application in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending claims.

If a telephone conference would advance prosecution of this Application in any manner, the Examiner is invited to call Justin N. Stewart, Attorney for Applicants, at (214) 953-6755.

The Commissioner is hereby authorized to charge \$810.00 for the Request for Continued Examination and \$490.00 for a two-month extension and to charge any additional fee or credit any overpayment to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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